

**CLAIMS**

- 1        1. A system for determining freight rates, comprising:  
2            a rate sheet input module for accepting data representative of a rate sheet, the  
3            rate sheet specifying freight rates;  
4            a rate sheet analyzer module adapted to interface with a template storage  
5            module for storing a plurality of templates, each template adapted to  
6            interpret a particular type of rate sheet, the rate sheet analyzer module  
7            for comparing the plurality of templates in the template storage module  
8            with the rate sheet to identify a template adapted to interpret the rate  
9            sheet; and  
10          a rule generation module for generating rules for calculating the freight rates  
11          responsive to the identified template and the rate sheet.
- 1        2. The system of claim 1, wherein the rate sheet is in a spreadsheet format.
- 1        3. The system of claim 1, wherein the rate sheet specifies zone-based rates.
- 1        4. The system of claim 1, wherein the system further comprises:  
2            a user-interface module adapted to provide an interface with which a user can  
3            specify information about the rate sheet.
- 1        5. The system of claim 1, wherein the rate sheet analyzer module identifies  
2        the template adapted to interpret the rate sheet responsive to keywords in the rate sheet.
- 1        6. The system of claim 5, wherein the keywords signify types of data in the  
2        rate sheet.
- 1        7. The system of claim 5, wherein the rate sheet analyzer module identifies  
2        the template responsive to locations of the keywords in the rate sheet.

1        8.     The system of claim 1, wherein the rate sheet analyzer module is adapted  
2 to identify potential errors in the rate sheet.

1        9.     The system of claim 1, wherein the template storage module is local to the  
2 rate sheet analyzer module.

1        10.    The system of claim 1, wherein the template storage module is remote  
2 from the rate sheet analyzer module.

1        11.    The system of claim 1, further comprising:  
2              a communications module for communicating the rate sheet to a remote  
3              location for analysis.

1        12.    The system of claim 11, wherein the communications module is adapted to  
2 communicate the rate sheet to the remote location responsive to a determination by the  
3 rate sheet analyzer module that no template in the template storage module is adapted to  
4 interpret the rate sheet.

1        13.    The system of claim 1, further comprising:  
2              a communications module for receiving templates adapted to interpret rate  
3              sheets and providing the templates to the template storage module.

1        14.    The system of claim 1, further comprising:  
2              an accessorial charge module for accepting data representative of accessorial  
3              charges for the freight rates;  
4              wherein the rule generation module generates the rules for calculating the  
5              freight rates responsive to the accessorial charges.

1        15.    The system of claim 1, wherein the rule generation module generates  
2 Prolog rules for calculating freight rates.

1       16. A method of determining freight rates, comprising:  
2           receiving data representative of a rate sheet, the rate sheet specifying freight  
3           rates;  
4           interfacing with a template storage module storing a plurality of templates,  
5           each template adapted to interpret a particular type of rate sheet;  
6           comparing the plurality of templates in the template storage module with the  
7           rate sheet to identify a template adapted to interpret the rate sheet; and  
8           generating rules for calculating the freight rates responsive to the identified  
9           template and the rate sheet.

1       17. The method of claim 16, wherein the rate sheet is in a spreadsheet format.

1       18. The method of claim 16, wherein the rate sheet specifies zone-based rates.

1       19. The method of claim 16, further comprising:  
2           provide a user interface with which a user can specify information about the  
3           rate sheet.

1       20. The method of claim 16, wherein the comparing comprises:  
2           identifying the template adapted to interpret the rate sheet responsive to  
3           keywords in the rate sheet.

1       21. The method of claim 20, wherein the keywords signify types of data in the  
2       rate sheet.

1       22. The method of claim 20, wherein the identifying occurs responsive to  
2       locations of the keywords in the rate sheet.

1       23. The method of claim 16, further comprising the step of:  
2           identifying potential errors in the rate sheet.

1        24. The method of claim 16, wherein the template storage module is local.

1        25. The method of claim 16, wherein the template storage module is remote.

1        26. The method of claim 16, wherein the comparing further comprises:  
2                communicating the rate sheet to a remote location for analysis.

1        27. The method of claim 26, wherein the communicating comprises:  
2                communicating the rate sheet to the remote location responsive to a  
3                determination that no template in the template storage module is  
4                adapted to interpret the rate sheet.

1        28. The method of claim 16, further comprising:  
2                receiving templates adapted to interpret rate sheets; and  
3                providing the templates to the template storage module.

1        29. The method of claim 16, further comprising:  
2                accepting data representative of accessorial charges for the freight rates; and  
3                generating rules for calculating the freight rates responsive to the accessorial  
4                charges.

1        30. The method of claim 16, wherein the generated rules comprise Prolog  
2        rules.

1        31. A computer program product comprising:  
2                a computer-readable medium having computer program logic embodied  
3                therein for determining freight rates, the computer program logic  
4                comprising:  
5                a rate sheet input module for accepting data representative of a rate sheet,  
6                the rate sheet specifying freight rates;

7           a rate sheet analyzer module adapted to interface with a template storage  
8           module for storing a plurality of templates, each template adapted  
9           to interpret a particular type of rate sheet, the rate sheet analyzer  
10          module for comparing the plurality of templates in the template  
11          storage module with the rate sheet to identify a template adapted to  
12          interpret the rate sheet; and  
13          a rule generation module for generating rules for calculating the freight  
14          rates responsive to the identified template and the rate sheet.

1        32.     The computer program product of claim 31, wherein the rate sheet is in a  
2     spreadsheet format.

1        33.     The computer program product of claim 31, wherein the rate sheet  
2     specifies zone-based rates.

1        34.     The computer program product of claim 31, wherein the computer  
2     program logic further comprises:  
3            a user-interface module adapted to provide an interface with which a user can  
4            specify information about the rate sheet.

1        35.     The computer program product of claim 31, wherein the rate sheet  
2     analyzer module identifies the template adapted to interpret the rate sheet responsive to  
3     keywords in the rate sheet.

1        36.     The computer program product of claim 35, wherein the keywords signify  
2     types of data in the rate sheet.

1        37.     The computer program product of claim 35, wherein the rate sheet  
2     analyzer module identifies the template responsive to locations of the keywords in the  
3     rate sheet.

1       38.   The computer program product of claim 31, wherein the rate sheet  
2 analyzer module is adapted to identify potential errors in the rate sheet.

1       39.   The computer program product of claim 31, wherein the template storage  
2 module is local to the rate sheet analyzer module.

1       40.   The computer program product of claim 31, wherein the template storage  
2 module is remote from the rate sheet analyzer module.

1       41.   The computer program product of claim 31, wherein the computer  
2 program logic further comprises:

3              a communications module for communicating the rate sheet to a remote  
4              location for analysis.

1       42.   The computer program product of claim 41, wherein the communications  
2 module is adapted to communicate the rate sheet to the remote location responsive to a  
3 determination by the rate sheet analyzer module that no template in the template storage  
4 module is adapted to interpret the rate sheet.

1       43.   The computer program product of claim 31, wherein the computer  
2 program logic further comprises:

3              a communications module for receiving templates adapted to interpret rate  
4              sheets and providing the templates to the template storage module.

1       44.   The computer program product of claim 31, wherein the computer  
2 program logic further comprises:

3              an accessorial charge module for accepting data representative of accessorial  
4              charges for the freight rates;  
5              wherein the rule generation module generates the rules for calculating the  
6              freight rates responsive to the accessorial charges.

1        45. The computer program product of claim 31, wherein the rule generation  
2 module generates Prolog rules for calculating freight rates.

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